# New Jersey's Transportation, Logistics & Distribution Industry Cluster

Prepared by:
New Jersey Department of Labor
& Workforce Development
Office of Labor Planning & Analysis
Bureau of Labor Market Information
Fall 2011

### The Transportation, Logistics & Distribution cluster consists of two major components

#### Transportation

- Air Transportation
- Rail Transportation
- Water Transportation
- Truck Transportation
- Transit and Ground Passenger Transportation
- Pipeline Transportation
- Scenic & Sightseeing Transportation
- Support Activities for Transportation
- Couriers & Messengers

#### Distribution

- Durable Goods Merchant Wholesalers
- Nondurable Goods Merchant Wholesalers
- Agents, Brokers & Wholesale Electronic Markets
- Warehousing & Storage

Logistics is process of efficiently routing goods and passengers from their point of origin to their final destination.

All transportation and distribution businesses use logistics principles.

However, third-party logistics companies that arrange the storage and shipping of goods for others are classified within Support Activities for Transportation.

### Transportation and distribution are important to the state's economy

In 2009, Transportation, logistics & distribution employed 363,440 workers in New Jersey. The cluster employed 11.9 percent of the state's private sector workers, a higher percentage than for the nation.

TLD contributed 48.6 billion current dollars to the state's gross domestic product (GDP) in 2009. New Jersey accounted for 4.2 percent of the nation's GDP generated from TLD.

New Jersey is the most densely populated state in the country (1,195 persons per square mile) and has a median household income of \$68,342, which is well above the national average (\$50,221). This makes it possible to reach millions of affluent consumers nearby.

Located between New York City and Philadelphia, New Jersey is within a day's drive of 40 percent of the US population, putting it within reach of 40 million people who purchase \$2 trillion in merchandise each year.

### New Jersey's excellent infrastructure make it a natural heavyweight in TLD

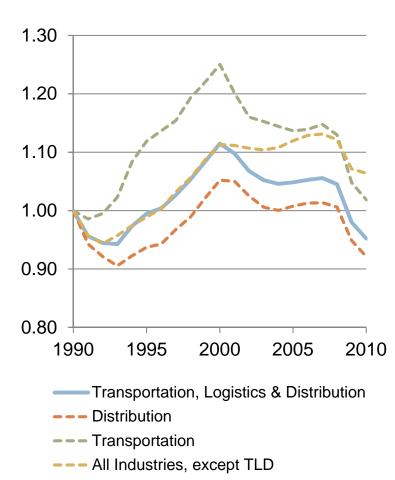
Together, the deep water ports of Newark and Elizabeth rank third among the nation's ports in 20-foot container units and first in the nation in automobile imports and exports. These ports are among the closest in the nation to Europe, making them an ideal location to ship goods to and from that continent.

New Jersey has an excellent land transportation network, including 36,000 miles of highways which carry 500,000 truckloads of freight each day. In addition, the state offers access to the nationwide rail network through lines operated by class 1 freight carriers Norfolk Southern and CSX. The state's commuter rail network carriers over 830,000 passengers each weekday. Passenger rail carriers include Amtrak, NJ Transit and SEPTA, which offer connections to locations within the state as well as to New York, Philadelphia and points beyond.

The Newark Liberty International Airport handled a total of 12,482,276 passengers in 2010 and offers flights to various cities in the United States as well as a full range of international flights. Federal Express also operates a 2-million-square-foot freight terminal at the airport.

## Since 2000, TLD employment has declined at a faster rate than the balance of private sector employment

#### Employment Index: 1990=1.00



From 1990 to 2000 TLD employment increased at nearly the same rate as all other private sector industries combined. However, TLD employment has declined 12.1 percent since 2000, more than the 3.8 percent loss sustained by all other industries from 2000 to 2010.

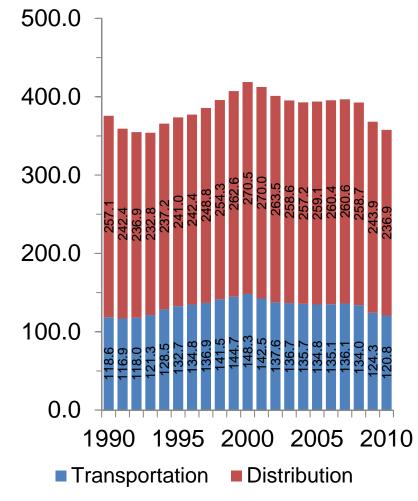
Since 1990, employment in distribution has declined (-7.9%) while jobholding in transportation registered a small gain (+1.9%) Employment rose more quickly in transportation than distribution until both industry groups peaked in 2000. Employment fell in both groups from 2000 to 2010.

New Jersey's TLD employers were able to reduce payrolls since 2000 because they are becoming more efficient. Although employment declined during this time, real GDP measured in chained 2005 dollars rose by 18.5 percent from 2000 to 2010.

## Payrolls in transportation are affected by the business cycle more than those in distribution.

Employment declines in the TLD cluster tend to occur during recessions and continue for several years thereafter before rebounding. Three recessions occurred during the 1990-2010 period. They were from July 1990 to March 1991, March 2001 to November 2001, and December 2007 to June 2009. All produced this trailing loss effect on TLD employment.

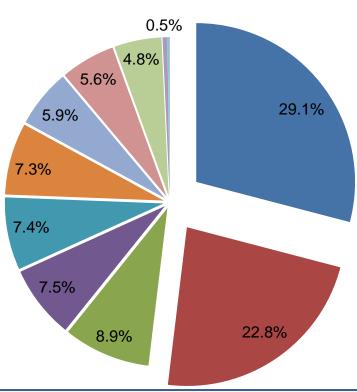
Payrolls in transportation are more volatile than in distribution and exhibit greater swings in both the upward and downward portions of the business cycle. For instance in the period 1992-to-2000, the time of greatest employment expansion during the 20-year period, transportation rose by 30.3% vs. 14.2% for distribution. Likewise, the sharpest drop took place between 2007 and 2010. Again, transportation lost a greater percentage of employment (-11.2%) than distribution (-9.1%).



Source: New Jersey Department of Labor & Workforce Development, Current Employment Statistics, 1990-2010

### In 2009, these 10 industry groups comprised 99.8 percent of TLD employment





The two largest TLD industry groups in New Jersey in 2009 were wholesalers of durable and nondurable goods, which together employed 188,657 workers, accounting for 51.9% of the state's TLD employment. This is less than in 2004, when these two industries employed 199,379 and comprised 52.1% of the cluster. In 2009, merchant wholesalers made up a slightly smaller proportion of the nation's TLD employment (49.8%).

The largest transportation industry group in New Jersey in 2009 was truck transportation, which made up 8.9% of the state's TLD cluster, down from 10.8 percent in 2004. In 2009, this industry comprised 13.2 % of the nation's TLD employment.

- Merchant wholesalers, durable goods
- Truck transportation
- Transit and ground passenger transportation
- Couriers and messengers
- Air transportation

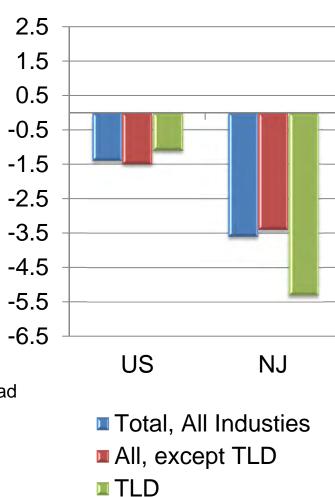
- Merchant wholesalers, nondurable goods
- Warehousing and storage
- Electronic markets and agents and brokers
- Support activities for transportation
- Water transportation

## In contrast to the nation, from 2004 to 2009, New Jersey's TLD cluster lost jobs at a faster rate than the economy as a whole.

From 2004 to 2009, total private sector employment declined by a greater percentage in New Jersey (-3.6%) than the nation (-1.4%). In the state TLD employment losses were greater (-5.3%) than for the rest of the private sector. In contrast, the nation's TLD sector lost a smaller percentage of jobs (-0.6%) than the economy as a whole.

During the five-year period, the fastest growing TLD industries in New Jersey were general warehousing and storage (+2,400 jobs) and scheduled passenger air transportation (+1,800 jobs), Nationally, the fastest growing industries were wholesale agents & brokers and general warehousing & storage.

The TLD industries that lost the most jobs in New Jersey during this time period were general freight trucking, local (-5,200 jobs) and general freight trucking, long distance truckload (-2,600 jobs). Nationally, the greatest losses occurred in scheduled passenger air transportation and lumber & wood merchant wholesalers.

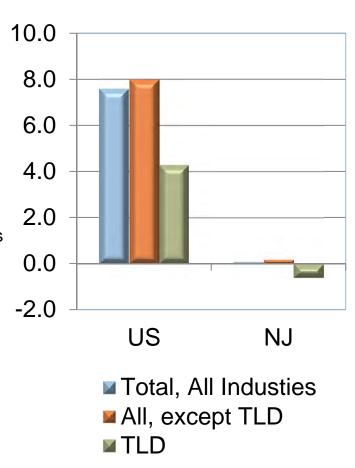


#### From 2004 to 2009, the number of business establishments in the nation grew by 7.6%. In contrast, the number of TLD establishments increased more slowly (+4.3%) over this time.

From 2004 to 2009, the total number of business establishments in the state remained nearly unchanged (+0.1%). In the TLD industries, the number of establishments in the state declined slightly (-0.6%). These was a slight gain in the number of establishments in industries outside of TLD (+0.2%). Nationally the total number of establishments increased by 7.6%. Outside of the TLD industries, the gain was slightly higher (+8.0%). Within TLD, the gain was somewhat less (+4.3%).

The New Jersey TLD industries that added the most establishments during this time were "all other" durable goods merchant wholesalers (+223) and druggists' goods merchant wholesalers (+122). In the nation, the largest gains were in wholesale trade agents & brokers and general warehousing & storage.

In the state, the industries that lost the most establishments over the 5-year period were wholesale trade agents & brokers and computer & supply merchant wholesalers. In the nation, the largest establishment losses were sustained by computer & supply merchant wholesalers and industrial machinery merchant wholesalers.



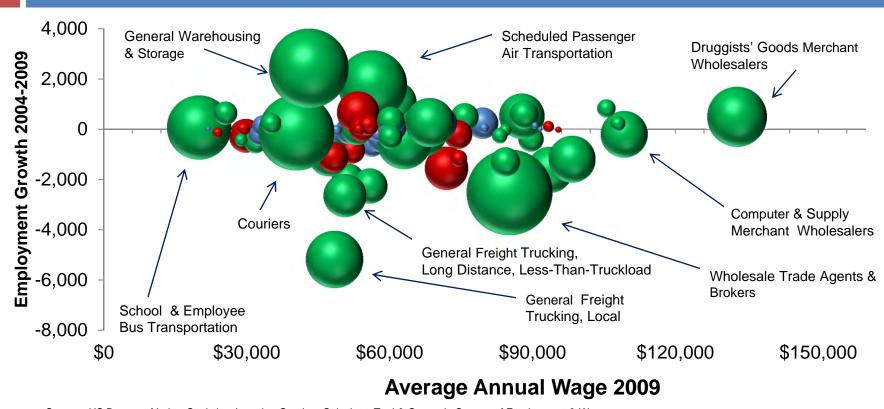
## Here is some technical information about how industries are classified and how industry concentration is measured.

- The federal government classifies industries according to the North American Industry Classification System, or NAICS. All business locations can be classified according to NAICS by the principal activity performed at that location. If the location is broken out separately, we look at what the <u>location</u> does, rather than what the company as a whole does. For instance, if Macy's has a warehouse, that location would be coded as a warehouse rather than a department store. NAICS is a hierarchical system which can classify establishments by up to a 6-digit code.
- One way of measuring the concentration of an industry in New Jersey or any other defined location is through its <u>location quotient</u>. Basically, the location quotient is the ratio of the percentage of employment an industry makes up in the state to the percentage the same industry makes up in the nation. For instance, if an industry makes up 3 percent of total statewide employment and 1 percent of national employment, it would have a location quotient of 3. A location quotient of 1.0 would mean the industry constitutes the same proportion of employment in the state as the nation. A location quotient of more than 1.0 means that the industry makes up a larger proportion of total employment in the state than the nation. A location quotient of less than 1.0 means that industry makes up a smaller proportion of employment in the state than the nation.
- On the next slide we will look at employment levels, wages and location quotients for each 6-digit NAICS industry in New Jersey's TLD cluster.

## Employment size, growth, and average salary of 126 industries that make up the TLD Cluster

Green bubble = Location Quotient >1.1

Red bubble = Location Quotient < 0.9



Source: US Bureau of Labor Statistics, Location Quotient Calculator Tool & Quarterly Census of Employment & Wages

Most TLD industries are present in a greater concentration in New Jersey's economy than in the nation as a whole. In 2009, most TLD industries paid annual average wages ranging from \$30,000 to \$60,000 per year. However, annual average wages at wholesalers tended to be higher than at employers in the transportation and warehousing sector. In several wholesale industries, annual average wages exceeded \$80,000 per year.

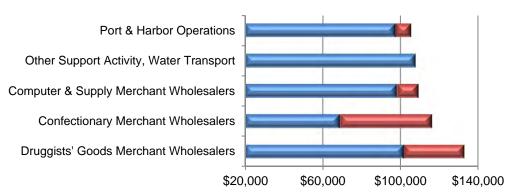
## The annual average wage in New Jersey's TLD sector in 2009 is \$62,907, up from \$55,752 in 2004, an increase of \$7,154, or 2.4% annually.

Nationally, the TLD cluster paid an annual average of \$53,759 in 2009, up 2.6% per year from \$47,297 in 2004

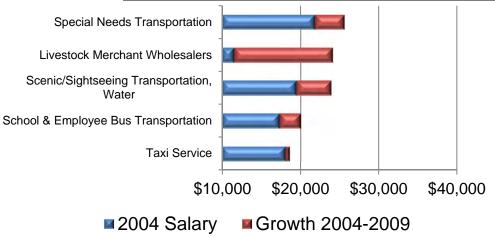
In 2004, the annual average wage paid to workers in the TLD cluster was 120.9 percent of the annual average wage paid to workers in the private sector. In New Jersey, the differential was slightly less (117.0%)

From 2004 to 2009, in the nation and state, annual average wages for workers in wholesale trade grew at the same rate as for private sector employment as a whole, but annual average wages in transportation and warehousing lagged. As a result, by 2009, TLD wages in the nation were 118.0 percent of the annual average private sector wage. In the state, TLD annual average wage was 115.3 percent of the annual average private sector wage.

#### 5 Highest Annual Average Wages, NJ, 2009



#### 5 Lowest Annual Average Wages, NJ, 2009



Source: New Jersey Department of Labor & Workforce Development, Quarterly Census of Employment & Wages, 2009

## 7 out of 9 TLD industries in New Jersey have a higher annual average wage than the nation. Overall, the cluster paid 17.0% more in New Jersey in 2009

Of New Jersey's 136 TLD industries in 2009, 98 paid a higher annual average wage than the same industry paid in the nation and in 28 industries, the state's annual average wage was lower.

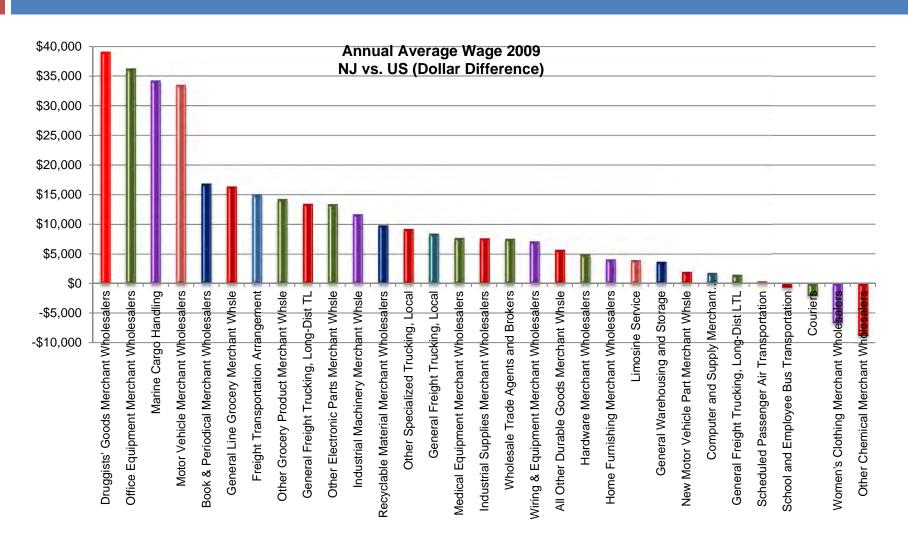
When TLD is broken out into its two major components, in New Jersey there were 75 industries in distribution and 51 in transportation. Annual average wages paid to workers in New Jersey's distribution industries were higher (\$70,989) than for workers in transportation industries (\$46,726). Also, workers in New Jersey's distribution industries earned more relative to distribution workers in the nation (+19.6%) than workers in New Jersey's transportation industries earned relative to people working in the transportation industry nationally (+7.7%).

The distribution industries in the state in 2009 with the highest annual average wages were Other Support Activity, Water Transport (\$107,916), Port & Harbor Operations (\$104,472) and Navigational Services to Shipping (\$93,172). In contrast, the transportation industries with the lowest annual average wages were Taxi Service (\$18,655), School & Employee Bus Transportation (\$20,064) and Scenic/Sightseeing Transportation, Water (\$23,948).

The state's distribution industries with the highest annual average wages were Druggists' Goods Merchant Wholesalers (\$132,873), Confectionary Merchant Wholesalers (\$116,144) and Computer & Supply Merchant Wholesalers (\$109,198). The distribution industries with the lowest annual average wages were Livestock Merchant Wholesalers (\$24,125), Nursery & Florist Merchant Wholesalers (\$38,103), and Used Motor Vehicle Part Merchant Wholesalers (\$42,151)

The chart on the next page shows the dollar difference in annual average wages between the state and the nation for the state's 31 largest TLD industries. These 31 industries comprise 71.1% of the state's TLD employment.

In 2009, 26 of New Jersey's 31 largest TLD industries had higher annual average wages than their national counterparts.

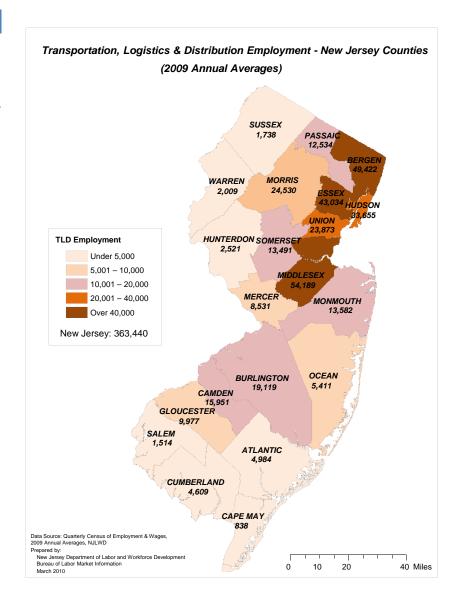


## Most of the state's TLD employment is located near the ports of Newark, Elizabeth and Camden as well as the New Jersey Turnpike

Middlesex, Bergen, Essex, Hudson, Morris and Union Counties account for 62.9 percent of New Jersey's TLD jobs. These counties are situated near the ports of Newark and Elizabeth and are located along the New Jersey Turnpike. New York City is located nearby.

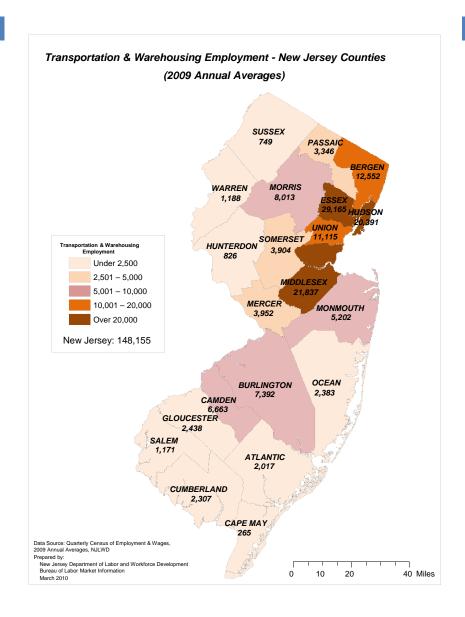
Other areas in the state that have substantial concentrations of TLD businesses include the western halves of Burlington, Camden and Gloucester counties and along the Atlantic coastline of Monmouth and Ocean counties. Burlington, Camden and Gloucester counties are located along the New Jersey Turnpike and I-295 and are near the Port of Camden and the City of Philadelphia.

Not all businesses have the same locational needs, but many TLD companies prefer to be close to a major Population center where goods can be sold. Other desirable attributes include easy access to the national highway system and access to a port. The counties along the New Jersey Turnpike provide all these things.



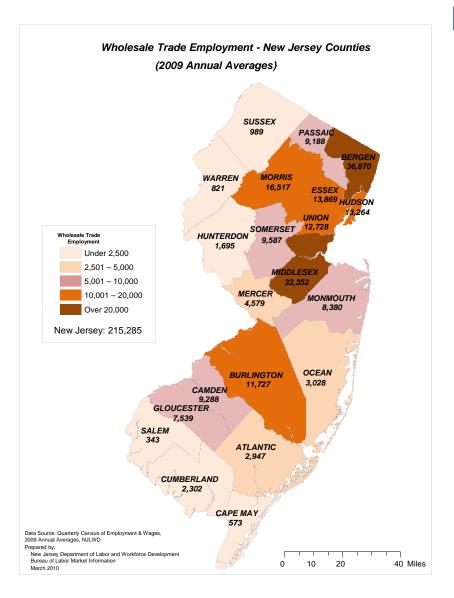
### Transportation employment in New Jersey is concentrated in the northeastern part of the state

Essex, Middlesex, Hudson, Bergen and Union counties host 64.1 percent of jobs in the state's transportation & warehousing sector. Many of these positions are based at facilities located within a short driving distance of the seaports in Newark and Elizabeth as well as the Newark Liberty International Airport.



## Wholesale trade positions are disbursed more widely throughout the state than transportation & warehousing jobs.

64.1% of positions in the wholesale trade sector are located in Bergen, Middlesex, Morris, Essex, Hudson, Union and Burlington counties. While many wholesalers prefer to be located close to the ports and turnpike, others have positioned themselves close to their customers. For that reason, wholesale trade businesses are more widely disbursed across the state than are companies in the transportation & warehousing sector.



### Some examples of New Jersey TLD Businesses

<u>Company</u>

BMW of North America Canon Business Solutions Continental Airlines

Con-Way Freight

CVS

FAPS, Inc. FedEx

First Student Fisher Scientific Maersk Line

Maher Terminals, Inc. Mercedes Benz, USA

NADE Panasonic

Stryker Orthopaedics

UPS

Wakefern Food Corporation

Location

Woodcliff Lakes Bridgewater

Newark

Newark

Lumberton

Newark Newark

Various Fair Lawn

Madison Newark Mahwah Bordentown Secaucus

Mahwah Mahwah

Elizabeth

**Business Description** 

Automobile distributor
Office equipment distributor

Airline

Less-than-truckload freight carrier

Pharmacy product distributor

Processor of vehicles for import/export

Package shipping & delivery

School bus line

Scientific equipment & reagent distributor

Deep water shipping line
Marine terminal operator
Automobile distributor
Motor vehicle auction
Electronics distributor

Prosthetic & medical equipment distributor

Package shipping & delivery

Grocery Distributor

## Transportation, Logistics & Distribution Businesses Utilize A Broad Range Of Occupations

#### Major Occupational Groups

- Management Occupations
- Business & Financial Operations Occupations
- Computer & Mathematical Occupations
- Architectural & Engineering Occupations
- Life, Physical & Social Science Occupations
- Community & Social Services Occupations
- Education, Training & Library Occupations
- Arts, Design, Entertainment, Sports & Media Occupations
- Healthcare Practitioners & Technical Occupations
- Healthcare Support Occupations
- Protective Service Occupations
- Food Preparation & Serving-Related Occupations
- Building & Grounds Cleaning & Maintenance Occupations
- Personal Care & Service Occupations

- Sales & Related Occupations
- Office & Administrative Support Occupations
- Farming, Fishing & Forestry Occupations
- Construction & Extraction Occupations
- Installation, Maintenance & Repair Occupations
- Production Occupations
- Transportation & Material Moving Occupations

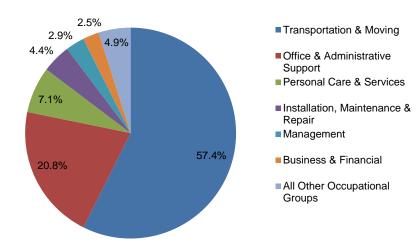
Of the 780 occupations found in New Jersey's economy, 405 are present in TLD. All 22 major occupational groups exist within transportation, logistics & distribution.

Based on occupational employment estimates for 2009, transportation, logistics & distribution employs about 369,500, and makes up 8.8 percent of the state's jobs.

You are Viewing an Archived Copy from the New Jersey State Library

## Overall, Over Half of Workers Employed by Transportation Businesses Work in Transportation & Moving Occupations

### Transportation Sector Percent Statewide Employment By occupational Group



By occupational group, 57.4 percent of workers employed at transportation companies worked in transportation & moving occupations.

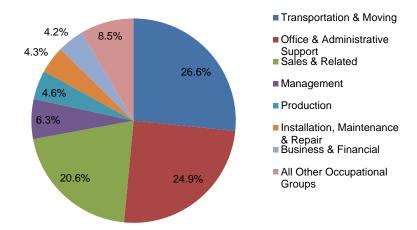
The second most numerous occupational group in transportation is office and administrative support workers (20.9%). Recordkeeping is an important function in both transportation and distribution and these workers are the most numerous types in both sectors.

The top three occupational groups make up 85.3 percent of employment in the transportation sector.

Personal care and service workers are the third most numerous occupational group. many of these are flight attendants and school bus aides.

## However, In Distribution, Office and Sales Occupations Each Employ Nearly as Many Workers as Transportation & Moving Occupations

### Distribution Sector Percent Statewide Employment By occupational Group



The top three occupational groups make up 72.1 percent of employment in the distribution sector.

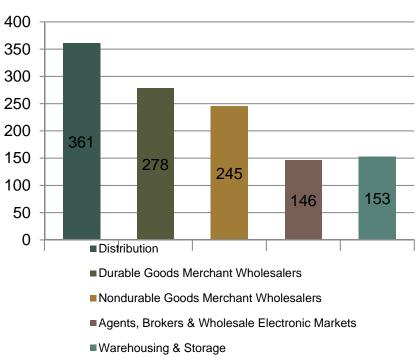
By occupational group, 26.6 percent of workers employed at distribution companies worked in transportation & moving occupations. many distribution businesses operate warehouses where goods are stored then delivered to customers.

The second most numerous occupational group in distribution is office and administrative support occupations (24.9%).

Sales and related occupations are the third Most numerous occupational group in the distribution sector (20.6%). This is because wholesale businesses sell products. The largest occupation in this category is wholesale sales representative.

## As an Industry is Narrowed Down To a Smaller Slice, The Number Of Occupations In The Industry Will Be Reduced

#### Number of Occupations In Distribution & Distribution Industries



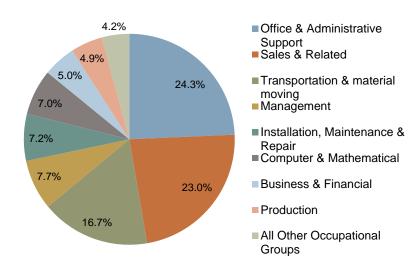
New Jersey Department of Labor & Workforce Development, Occupational Employment Matrix , 2009

When going to a smaller slice of the the cluster, the number of occupations narrows down. For instance, all of TLD contains 405 occupations, of which 361 are found in distribution, 225 in transportation and 181 are common to both.

Drilling down from distribution to the 3-digit NAICS industry level the number of occupations are: durable goods merchant wholesalers, 278; nondurable goods merchant wholesalers, 245; agents, brokers & wholesale electronics markets,146; and warehousing & storage, 153.

## The Staffing Pattern for the Transportation & Distribution Sectors is a Composite of the Underlying Industries

### Durable Goods Merchant Wholesalers Percent Statewide Employment by Occupational Group

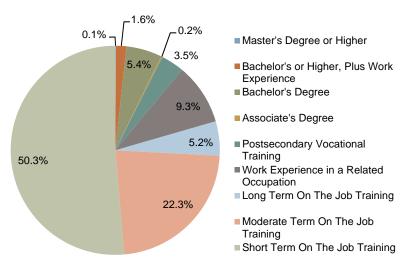


The staffing pattern of each industry is different and does not always follow the staffing pattern of the sector as a whole. For instance in the distribution sector, positions in transportation & material moving occupations are the most numerous. However at durable goods wholesalers, the top seven groups are office & administrative support (24.3%), followed by sales & related (23.0%), transportation & moving (16.7%), management (7.7%), installation, maintenance & repair (7.2%), computer & mathematical (7.0%), business & financial (5.0%) and production (4.9%).

Source: New Jersey Department of Labor & Workforce Development, Occupational Employment Matrix, 2009

## Most Jobs in the Transportation Sector Can Be Learned Through On-The-Job Training Rather Than Education

### Educational Requirements Occupations in the Transportation Sector



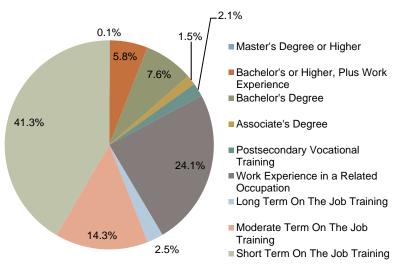
Based on the data, 50.3 percent of positions in transportation require short-term-on-the-job training, 22.3 percent require moderate-term-on-the-job-training and 9.3 percent require work experience in a related occupation.

Source: New Jersey Department of Labor & Workforce Development, Occupational Employment Matrix, 2009

One important caveat is that these educational requirements are for the minimum training that would be required to get a job in a particular occupation. In practice, most employers would require more training for certain occupations. For instance, truck driver, heavy and tractor trailer is listed as requiring short term on the job training, although most employers would require a minimum of a CDL license and truck driving school or work experience to be hired for a tractor trailer driving job.

### While Most Jobs in Distribution Can be Learned on the Job, the Sector Also Includes Many Positions Requiring College Degrees

### **Educational Requirements Occupations in the Distribution Sector**



Source: New Jersey Department of Labor & Workforce Development, Occupational Employment Matrix, 2009

In distribution, 58.1 percent of positions can be learned on the job, without taking formal classes in an educational institution.

Of the positions in the distribution sector, 1.5 percent are in occupations requiring an associate's degree, 7.6 percent are in occupations requiring a bachelor's degree and 5.3 percent are in occupations requiring a bachelor's degree or higher, plus work experience.

24.1 percent of all distribution sector positions are in occupations that require work experience in a related occupation. Of these positions, 63 percent are wholesale sales representatives. Although some businesses will consider applicants with related experience, most companies prefer college graduates for these jobs. Many of the non-sales positions in distribution requiring prior experience as a prerequisite are first-line supervisors of other staff.

### Top 20 Occupations in Transportation

	Estimated	Moon Annual	Educational/Training
Occupation Title	Estimated	Mean Annual	Educational/Training
Occupation Title	Employment 10,000	Salary ©42.240	Requirement
Truck Drivers, Heavy & Tractor-Trailer	19,000	\$43,340 \$35,840	Short-term on-the-job training
Laborers & Freight, Stock & Material Handlers	12,150	\$25,840	Short-term on-the-job training
Bus Drivers, School	11,000	\$31,080	Moderate-term on-the-job training
Truck Drivers, Light or Delivery Services	6,500	\$34,230	Short-term on-the-job training
Reservation & Transportation Ticket Agents & Travel		<b>^-</b>	
Clerks	5,350	\$35,220	Short-term on-the-job training
Flight Attendants	5,300	N/A	Long-term on-the-job training
Taxi Drivers & Chauffeurs	4,800	\$26,020	Short-term on-the-job training
Bus Drivers, Transit & Intercity	3,600	\$34,880	Moderate-term on-the-job training
Airline Pilots, Copilots & Flight Engineers	3,300	\$137,930	Bachelor's degree
Cargo & Freight Agents	3,200	\$38,000	Moderate-term on-the-job training
First-Line Supervisors/Managers of Transportation &			
Material-Moving Machine & Vehicle Operators	2,700	\$60,380	Work experience in a related occupation
Dispatchers, Except Police, Fire & Ambulance	2,700	\$39,820	Moderate-term on-the-job training
Transportation Attendants, Except Flight Attendants			
and Baggage Porters	2,550	\$19,640	Short-term on-the-job training
Shipping, Receiving & Traffic Clerks	2,300	\$32,160	Short-term on-the-job training
Customer Service Representatives	2,250	\$35,350	Moderate-term on-the-job training
Sales Representatives, Services, All Other	2,200	\$72,190	Work experience in a related occupation
Industrial Truck & Tractor Operators	2,150	\$32,400	Short-term on-the-job training
			·
Bus & Truck Mechanics & Diesel Engine Specialists	1,900	\$47,430	Postsecondary vocational training
Secretaries, Except Legal, Medical & Executive	1,850	\$35,980	Moderate-term on-the-job training
Office Clerks, General	1,700	\$29,220	Short-term on-the-job training

76.8 percent of the workers in the transportation sector work in these 20 occupations.

### Top 20 Occupations in Distribution

Sales Representatives, Wholesale & Manufacturing,			
Except Technical & Scientific Products	29,150	\$69,990	Work experience in a related occupation
Laborers & Freight, Stock & Material Handlers, Hand	25,450	\$25,840	Short-term on-the-job training
Truck Drivers, Heavy & Tractor-Trailer	9,100	\$43,340	Short-term on-the-job training
Stock Clerks & Order Fillers	9,050	\$24,080	Short-term on-the-job training
Sales Representatives, Wholesale & Manufacturing,			•
Technical & Scientific Products	7,900	\$96,800	Work experience in a related occupation
Office Clerks, General	7,700	\$29,220	Short-term on-the-job training
Shipping, Receiving & Traffic Clerks	7,100	\$32,160	Short-term on-the-job training
Packers & Packagers, Hand	6,950	\$21,430	Short-term on-the-job training
Customer Service Representatives	6,850	\$35,350	Moderate-term on-the-job training
Industrial Truck & Tractor Operators	6,300	\$32,400	Short-term on-the-job training
Bookkeeping, Accounting & Auditing Clerks	6,050	\$38,500	Short-term on-the-job training
General & Operations Managers	5,500	\$157,030	Bachelor's or higher degree, plus work experience
Truck Drivers, Light or Delivery Services	4,900	\$34,230	Short-term on-the-job training
First Line Supervisors/Managers of Office &			
Administrative Support Workers	4,350	\$53,590	Work experience in a related occupation
First-Line Supervisors/Managers of Non Retail Sales			
Workers	4,000	\$95,090	Work experience in a related occupation
Secretaries, Except Legal, Medical & Executive	4,000	\$35,890	Moderate-term on-the-job training
Order Clerks	3,820	\$35,100	Short-term on-the-job training
Driver/Sales Workers	3,550	\$29,200	Short-term on-the-job training
First-Line Supervisors/Managers of Helpers,			
Laborers, & Material Movers, Hand	3,050	\$47,320	Work experience in a related occupation
Sales Managers	2,700	\$132,950	Bachelor's or higher degree, plus work experience
Source: New Jersey Department of Labor & Workforce Development, Occupat	ional Employment Matrix	, 2009 and Occupation	onal Employment Statistics Wage Survey, 2009.

64.6 percent of the workers in the distribution sector work in these 20 occupations.

### Online Resources For More Information About Industries and Occupations

This presentation only scratches the surface of information available about occupations within the transportation, logistics and distribution industry cluster. The US Bureau of Labor Statics has two publications available online that describes various industries and occupations in more detail than is possible here.

The Career Guide to Industries is available online at <a href="www.bls.gov/oco/cg/">www.bls.gov/oco/cg/</a>
This publication tells you about occupations in various industries including training required, advancement opportunities, earnings, occupational outlook and working conditions.

The Occupational Outlook Handbook is available online at <a href="www.bls.gov/oco/">www.bls.gov/oco/</a>
It provides occupational information similar to the Career Guide to Industries, but in greater det

Both publications are useful for both employment counselors, job developers and human resources professionals as well as for students and others interested in going into a new career.

The following slides provide information gleaned from these books about three common TLD occupations.

### Sales Representatives, Wholesale & Manufacturing

- Sales representatives work for distributors or manufacturers and sell products to other businesses. The position involves developing relationships with decision makers that buy the goods the sales representative sells.
- Some sales representatives specialize in technical and scientific products such as computers, medical equipment or pharmaceuticals. Representatives selling these kinds of products usually earn more than sales representatives selling non-technical items such as groceries or office supplies.
- Sales representatives usually are compensated by a combination of salary and commission. Since the amount of commission depends on sales volume, wages can fluctuate from paycheck to paycheck. Workers in this occupation must be able to deal with fluctuations in income.
- Although it is possible to get a sales representative position without college by working
  in a related job and becoming familiar with the goods sold, most companies prefer
  college graduates. College is good preparation for a sales career because it helps
  develop social skills and the ability to learn the knowledge needed to sell the product.

#### Truck Drivers, Heavy & Tractor-Trailer

- Heavy truck drivers operate straight trucks with a gross vehicle weight of more than 12 tons. Some
  examples include beer trucks, cement mixers and dump trucks. Tractor trailer drivers operate
  articulated trucks consisting of a tractor and a trailer. Both heavy truck and tractor trailer drivers
  require a CDL or commercial driver's license to operate their vehicles. Although it is possible to get a
  CDL without going to school, most drivers attend truck driving school prior to getting licensed.
- Many tractor trailer drivers are long distance or over-the-road drivers. They can be away from home for days or weeks at a time and may drive for up to 11 hours each day, 7 days a week. They often are responsible for planning their own routes and must get their loads to their destinations on time. They have to keep a log book showing time traveled and route taken. They must know applicable traffic laws and truck regulations. Federal regulations also require that drivers pass regular physicals as well as drug and alcohol screening.
- Local drivers driving in-state can work more than 11 hours a day. They are often responsible for loading and unloading their truck. The job often involves a lot of walking and lifting. They may be required to collect money from customers and issue receipts.
- Due to the high value of the vehicle and its load, trucking companies often require drivers to be at least 21 years old and have a year of commercial driving experience and a clean driving record.

#### Laborers & Material Movers, Hand

- Laborers & material movers move freight, stock or other materials by hand, they may feed materials into or remove materials from machinery or equipment and they may pack or package products or materials. Despite workplace automation, many products must be handled by a variety of workers during the distribution process. Although employment is expected to decline for this occupation, there will still be many employment opportunities for laborers and material handlers as workers retire or leave the job for other reasons.
- Most jobs in this field require little work experience or training. Pay is low for many positions.
- Many material movers need to be able to read shipping documents and understand instructions so they can locate the correct articles to move and get them to their proper location.
- The job also generally requires the ability to stand for long periods and lift objects in excess of 50 pounds. The work tends to be repetitive and physical demanding. Workers may be required to assume awkward positions, work at heights or in heat or cold environments and work around noise or toxic chemicals.
- The occupation shares many characteristics in common with other occupations such as feeder/offbearer, refuse collector, grocery bagger and baggage and cargo handler. Many of the skills and abilities required for these occupations are interchangeable.
- Advancement is possible. Workers who remain on the job and possess the appropriate skillsets can advance to industrial truck driver or to becoming first-line supervisors of material movers and laborers.

### The American Community Survey provides a profile of the state's workforce

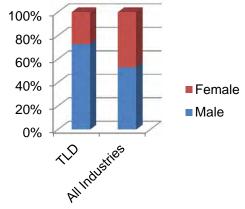
The American Community Survey (ACS) is an annual survey by the US Bureau of the Census that provides on a yearly basis the same data that used to be obtained every 10 years from the Census long form which was discontinued after the 2000 Census.

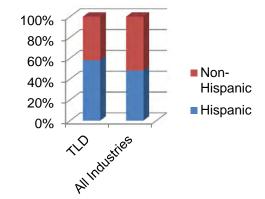
The ACS provides data about New Jersey residents on a broad range of subjects.

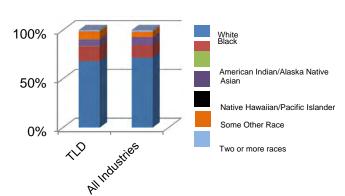
The following slides were prepared using microdata from ACS for the year 2009. This data shows some of the ways New Jersey residents who work in the TLD cluster differ from residents employed in all industries.

## How the TLD workforce compares with workers in all industries by sex, ethnicity and race

The TLD workforce differs demographically from the workforce at large because by sex it is more male (72.8% vs. 53.1%) and by ethnicity more Hispanic (22.4% vs. 16.2%). By race the TLD workforce is less white (68.2% vs. 71.9%), less Asian (6.4% vs7.9%) and is composed of more blacks (15.5% vs. 12.8%) and persons identifying themselves as being a race besides those listed (8.1% vs. 5.4%). Many of those identifying themselves as being another race are of Hispanic ethnicity.



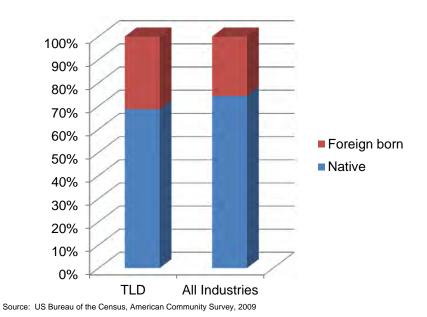




Source: US Bureau of the Census, American Community Survey, 2009

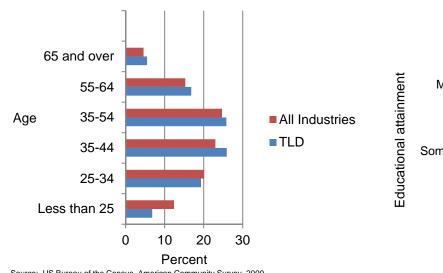
#### TLD Workers are more likely to be foreign born than workers in the state as a whole

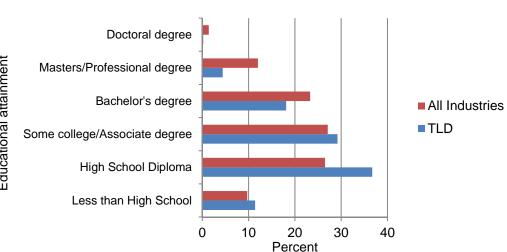
In the TLD cluster, 68.6 percent of workers are native-born and 31.3 percent are foreign-born. In all industries in the state, the percentage of foreign-born workers is lower (25.6%). Many positions in the TLD industry such as warehouse laborer have low entry requirements and can be performed by workers with no prior experience and little command of the English language. English speaking ability is less important to perform these jobs than the ability to communicate with others. Foreign-born workers with little knowledge of English often work at facilities where the supervisors and other workers speak the same non-English language.



### How the TLD workforce compares with workers in all industries by age and education

By age, the TLD workforce is older than the workforce as a whole. It has a lower percentage of workers under the age of 25 (6.8% vs. 12.4%) and between the ages of 25 and 34 (19.3% vs. 20.1). On the other hand, TLD has a higher percentage of workers than the economy as a whole in all age groups age 35 and older. By level of educational attainment, TLD has a higher percentage of workers in educational categories below a bachelor's degree and a lower percentage of workers with bachelor's degrees or higher. The difference is especially pronounced among workers with a high school diploma (TLD 36.7% vs. all other industries, 26.5%).

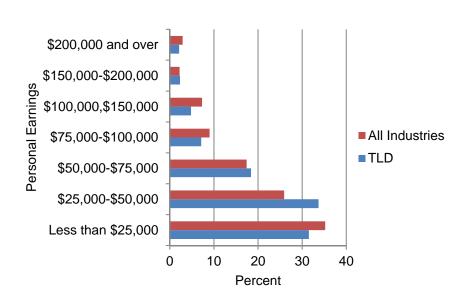


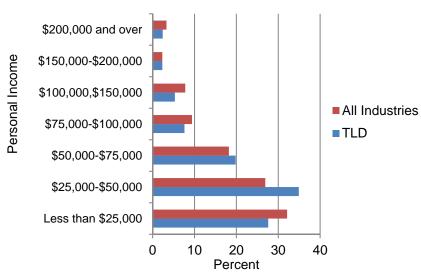


Source: US Bureau of the Census, American Community Survey, 2009

### How the TLD workforce compares with workers in all industries by personal earnings and income

By annual personal earnings, the TLD cluster when compared with all industries in New Jersey has higher proportions of workers earning from \$25,000 to 50,000 ( 33.7% vs. 25.9%) and \$50,000 to \$75,000 (18.4% vs.17.4%) and nearly the same percentage earning between \$150,000 and \$200,000 (2.3% vs. 2.2%). In all other personal earning categories, the TLD cluster was underrepresented. Jobs in the TLD cluster provide many workers with "good" jobs that provide a living wage capable of supporting a middle class lifestyle.

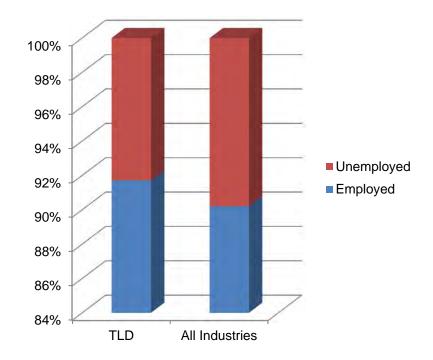




Source: US Bureau of The Census, American Community Survey, 2009

# Workers who most recently worked in the TLD cluster are more like to be employed than workers in the state's economy as a whole

In addition to personal income, another statistic which shows that jobs in TLD are "good" jobs is that workers that most recently worked In the TLD cluster are less likely to be unemployed than workers in all industries in the state. In 2009, 8.3% of workers in TLD were unemployed vs. 9.8% for all industries in the state.



Source: US Bureau of the Census, American Community Survey, 2009

#### Local Employment Dynamics is another source of information about TLD workers

Local Employment Dynamics (LED) is a product produced by the US Census Bureau in cooperation with the Bureau of Labor Statistics and the states. It is a database derived from IRS wage record files and quarterly census of employment and wages records with confidential information identifying individual employees removed.

This database is useful for obtaining information about the workforce and employment trends in various industries.

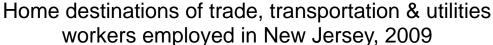
The following slides were produced with information obtained from LED.

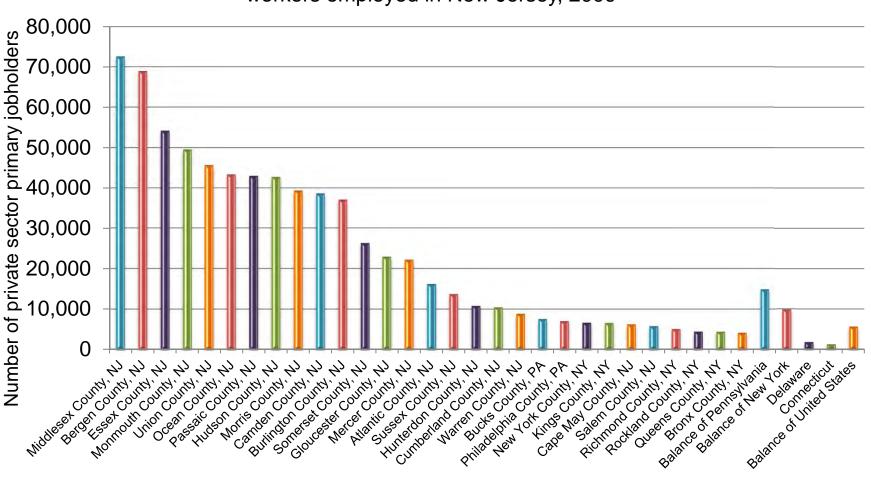
#### Where do the workers live? Where do they work?

Currently, LED does not offer a way to obtain comprehensive commutation data for the TLD cluster. However, it does provide a breakout for the trade, transportation and utilities supersector. Trade, transportation & utilities contains the retail trade and utilities sectors in addition to TLD.

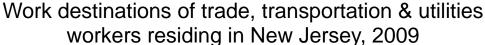
The following two slides show by county of residence where workers employed in New Jersey's trade, transportation & utilities supersector lived in 2009 as well as the county of employment for trade, transportation & utilities workers residing in New Jersey.

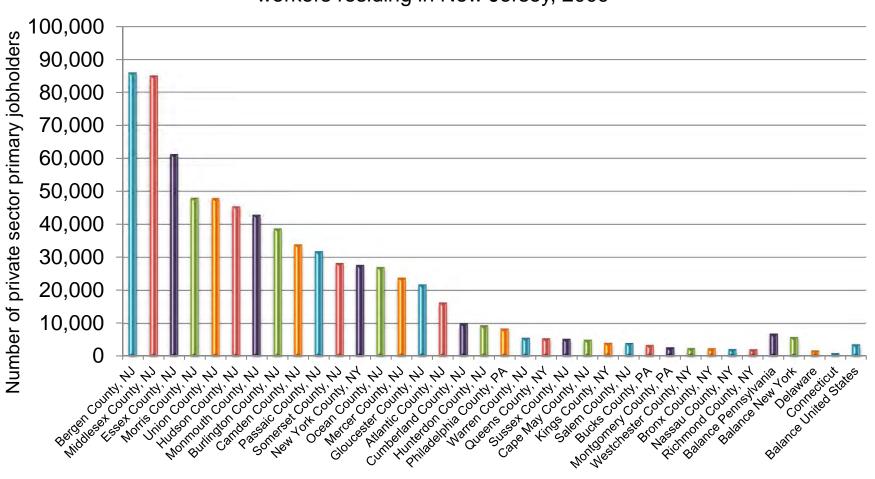
#### Where do New Jersey's Trade, Transportation & Utilities workers live?





#### Where do New Jerseyians employed in trade, transportation & utilities work?





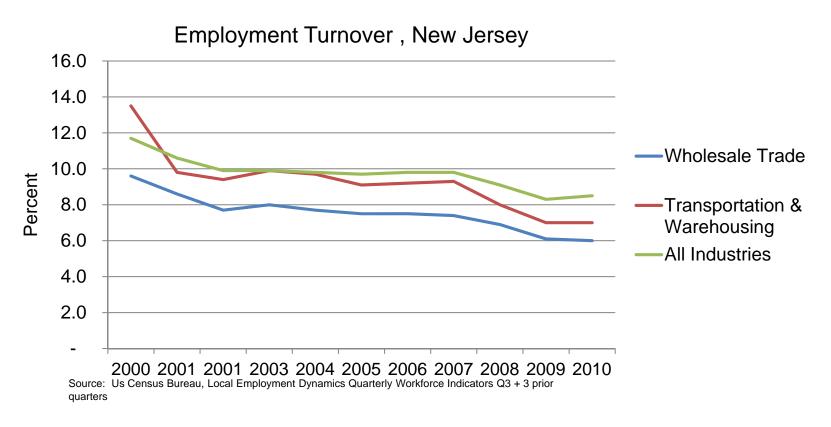
Source: US Bureau of the Census, Local Employment Dynamics, 2009

# A few facts about the commuting pattern for workers in New Jersey's trade, transportation & utilities supersector

In 2009, a total of 761,044 workers lived in New Jersey who held private-sector positions in the trade, transportation & utilities supersector as their primary job. Of these state residents, 89.3% (679,626) also worked in the state. For the 10.7% (81,418) that lived here but worked out-of-state the most popular work destination was New York City. Together, the five boroughs of New York employed 51.8% (42,186) of New Jersey residents employed in the supersector who work out-of-state. The borough which employed the most New Jersey residents was Manhattan (New York County, NY) with 27,767 state residents working there. By state, New York employs the most New Jersey residents (52,977) working in trade, transportation & utilities, followed by Pennsylvania (21,799), Delaware (1,851) and Connecticut (1,027). A total of 3,764 state residents hold jobs in the remaining 46 states. Work destinations in the remainder of the country include a variety of unlikely locations, including Los Angeles County, California (165) and Clark County, Nevada (33). Clark County's largest city is Las Vegas.

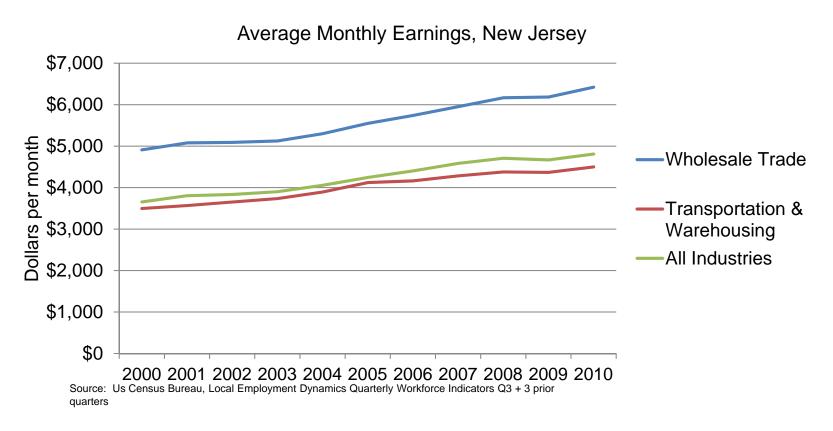
A total of 759,941 workers were employed in New Jersey's trade, transportation & utilities supersector in 2009. Of these, 89.5% also lived in the state. For the 10.5% (80,079) who live out-of-state but work here, the most popular place to live was New York City, which is home to 27,156 people whose main jobs were in trade, transportation & utilities. Other out-of-state locations were substantial numbers of New Jersey's trade, transportation & utilities workers live include Bucks County, Pennsylvania (7,628), Philadelphia, Pennsylvania (7,093) and Rockland County, New York (4,515). The state with the most New Jersey residents employed in trade, transportation and utilities is New York (41,575), followed by Pennsylvania (29,700), Delaware (1,876) and Connecticut (1,285). In addition, another 5,643 workers are employed in New Jersey and live in one of the other 46 states. These workers live in all parts of the country. For example,106 live in Harris County, Texas and 35 live in Broward County, Florida. The largest city in Harris county is Houston and Broward County's largest city is Ft. Lauderdale.

#### **Employment Turnover Rate**



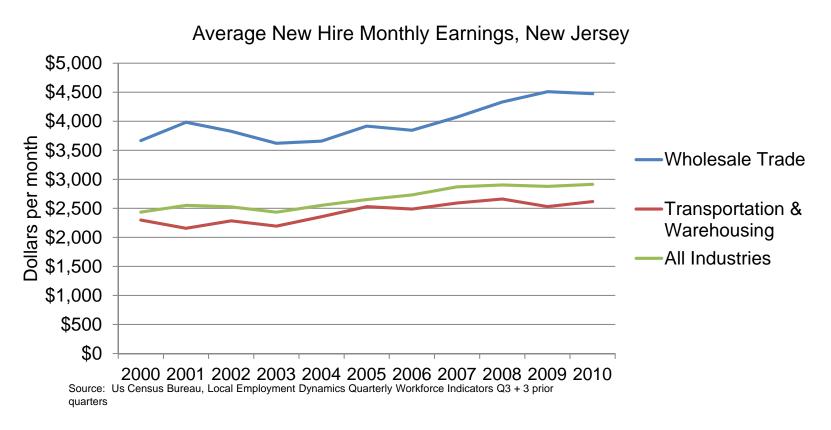
For the past decade, the transportation, logistics & distribution cluster has had a lower employee turnover rate than businesses in the economy as a whole. Turnover in wholesale trade normally runs lower than turnover in transportation & warehousing. Employee turnover rates in TLD and the state's economy as a whole has fallen since 2000. This trend accelerated during the 2007-2009 period, a time of rising unemployment. During recessions, when people feel less secure about their jobs, turnover rates normally fall because people are reluctant to quit the positions they already have.

#### **Average Monthly Earnings**



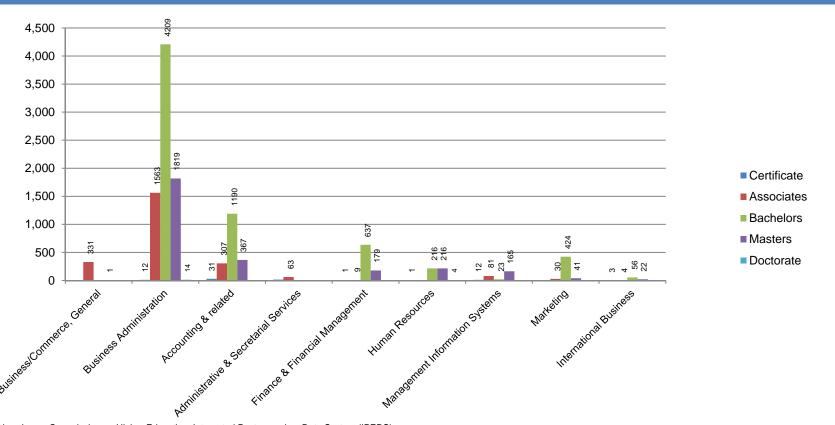
Since 2000, monthly earnings for workers in the wholesale trade sector averaged 31.8% more than earnings for workers in all industries. However, monthly earnings fro workers in the transportation & warehousing sector averaged slightly less than average earnings for all workers in New Jersey.

#### Average New Hire Monthly Earnings



Since 2000, monthly earnings for newly hired workers in the wholesale trade sector averaged 49.1% more than earnings for new employees in all industries. However, monthly earnings for newly hired workers in the transportation & warehousing sector averaged slightly less than average earnings for all newly hired workers in New Jersey.

### Business degrees conferred by New Jersey colleges & universities in 2010

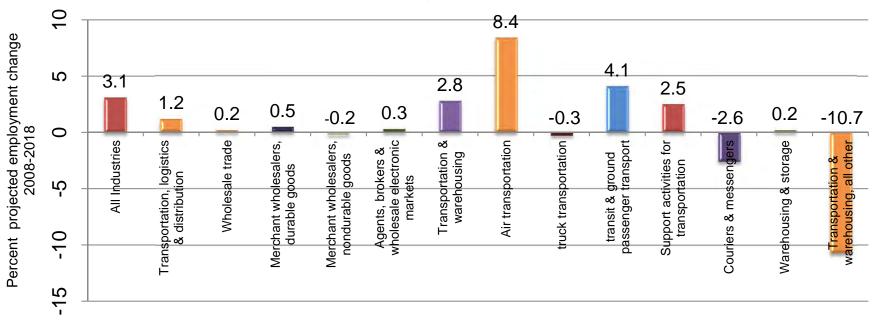


Source: New Jersey Commission on Higher Education, Integrated Postsecondary Data System (IPEDS)

In the TLD cluster, most jobs that require a college education are filled by people with business degrees. By far, the business degree most conferred in New Jersey in 2010 was business administration. Accounting came in a distant second. Other business degrees directly related to work in TLD are relatively uncommon. This chart does not show business degrees unrelated to TLD such as hospitality management, nor does it show degrees awarded in very small numbers such as management sciences & quantitative methods.

### Employment in New Jersey's TLD cluster is projected to grow more slowly than the average rate of gain for all industries from 2008 to 2018





Source: New Jersey Department of Labor & Workforce Development, Industry Employment Projections 2008-2018.

Although employment in the TLD cluster is projected to grow more slowly during the 2008-2018 period (1.2%) than the average rate of gain for all industries in the state (3.1%), air transportation jobholding is expected to expand rapidly (8.4%) during this time. In the past decade, TLD employers have enjoyed substantial productivity gains and have been able to increase output while employing fewer workers. As technology advances, further productivity gains are likely during the 2008-2018 period.

### A little about industry and occupational employment projections

Both the industry and occupational employment projections were developed using time series and regression mathematical modeling. The primary input into the computer model is an employment time series by industry that goes back to 1990. Other variables such as population estimates and national industry employment trends developed by the US Bureau of Labor Statistics are also used in the analysis. The results are then reviewed for reasonableness any may be adjusted upward or downward as appropriate.

Since these are long-term projections for a 10-year period, no attempt is made to adjust them for the business cycle. During periods of recession, the projections will most likely overstate job gains and in periods of expansion understate them. The projections are not meant to be either predictions or forecasts and are not intended to provide a precise measure of the long-term trend for either industry or occupational employment. However they are useful as a guide in gauging the future employment trend.

Projections are less accurate as for smaller sized categories than for larger categories. That is the main reason why occupational projections are not made available by industry. Rather, they are published for all industries together. For that reason, there is no data available from this source for growth of occupations within TLD. As a substitute, the following slides provide occupational projections data for the 20 largest occupations within transportation and the 20 largest occupations within distribution according to 2009 QCEW data. Please keep in mind that the projections data are for all workers within an occupation and that many workers in these occupations are not employed in the TLD cluster. However, since these 20 occupations in 2009 represented 76.8 percent of transportation employment and 64.6 percent of jobs in distribution, the projections data can serve as an indication of occupational employment trends within these two industry groups.

## 2008 estimated employment & 2018 projected employment for the 20 transportation occupations with the largest employment in 2009

		2008 Estimated	2018 Projected	Change 2008-2018		Annual Average Job Openings		enings
	Occupation Title	Employment	Employment	Number	Percent	Total	Growth	Replacements
ı	Laborers & freight, stock & material movers, hand	79,650	73,500	-6,150	-7.7%	2,560	0	2,560
(	Customer service representatives	59,400	65,100	5,700	9.6%	2,440	570	1,020
(	Office clerks, general	74,650	76,550	1,900	2.5%	1,210	190	1,020
;	Secretaries, except legal, medical & executive	81,100	77,450	-3,650	-4.5%	1,090	0	1,090
•	Truck drivers, heavy & tractor trailer	47,000	49,050	2,050	4.3%	1,050	200	840
	Sales representatives, services, all other	33,350	33,850	500	1.5%	880	50	830
;	Shipping, receiving & traffic clerks	23,700	20,700	-3,000	-12.7%	590	0	590
•	Truck drivers, light or delivery services	27,950	27,800	-150	-0.5%	500	0	500
- 1	Industrial truck & tractor operators	15,950	15,650	-350	-2.1%	480	0	480
- 1	Bus drivers, school	18,350	19,150	750	4.1%	400	80	320
•	Taxi drivers & chauffeurs	12,300	13,550	1,200	9.9%	340	120	220
- 1	Reservation & transportation ticket agents & travel							
	clerks	6,100	6,500	400	6.9%	180	40	140
	Flight attendants	5,500	6,050	500	8.8%	170	50	130
	Airline pilots, copilots & flight engineers	3,750	4,100	350	9.5%	160	40	130
ı	Bus & truck mechanics & diesel engine specialists	6,800	6,850	50	0.5%	160	0	160
(	Cargo & freight agents	3,900	4,400	550	13.8%	140	50	90
	First-line supervisors/managers of transportation &							
ı	material-moving machine & vehicle operators	8,050	7,400	-650	-8.1%	140	0	140
	Dispatchers, except police, fire & ambulance	6,150	5,550	-600	-9.9%	130	0	130
I	Bus drivers, transit & intercity	4,850	4,800	-50	-0.7%	80	0	80
	Transportation attendants, except flight attendants							
	and baggage porters	2,900	2,900	0	0.2%	70	0	60

Source: New Jersey Department of Labor & Workforce Development, Occupational Employment Projections 2008-2018.

Of the 20 occupations employing the most workers at transportation companies in 2009, 12 are projected to register employment gains between 2008 and 2018 and 8 are projected to loose employment.

# Greater efficiency in warehouse and office operations are behind job losses in certain occupations.

Of the 20 largest occupations within transportation, the 8 occupations that are projected to loose employment over the 2008-2018 period are laborers & freight, stock & material movers, hand (-6,150), secretaries, except medical, legal &executive (-3,650), shipping, receiving & traffic clerks (-3,000), first-line supervisors/managers of transportation & material-moving machine & vehicle operators (-650), dispatchers, except police, fire & ambulance (-600), industrial truck &tractor operators (-350), truck drivers, light (-150), and bus drivers, transit & intercity (-50).

Two main reasons can sum up why employment is projected to decline in these occupations. These are more automation in the office as well as the warehouse floor and the trend toward larger trucks.

In warehousing, greater use is being made of technology such as radio frequency identification (RFID), which involves the placement of small radio transmitters on palates or in products. This initially was used to better allow businesses to track inventory and has helped cut down on the need for low-level warehouse personnel such as warehousing clerks and laborers, who were often tasked with physically inventorying or tracking down merchandise. RFID has also made possible the construction of warehouses with automated freight handling equipment that can locate a palate of goods and bring it to the loading dock at the push of a button. As more of these new-generation warehouses are built, there will be less need for laborers as well as supervisors and forklift operators.

Automation has also impacted the office, resulting in less need for secretaries and dispatchers. More workers are doing their own typing, rather than relying on secretaries to take dictation or type for them. Also, computer software is getting better, allowing secretaries and other clerical workers to become more productive. Advances in communications such as smart phones has simplified the task of routing trucks to their destinations, reducing the need for dispatchers.

As trucks get larger, it is possible for drivers to haul more goods in a single trip than with smaller equipment. Over the years, trucks have gotten larger and will probably continue to grow in size in the future. The difference between a heavy truck driver and a light truck driver is that a heavy truck driver needs to have a commercial driver's license while a light truck driver does not. While the number of light truck drivers is expected to decline, the number of heavy and tractor-trailer truck drivers is expected to increase by 2,050 from 2008 to 2018 as more businesses switch to larger vehicles.

### At the same time, other occupations commonly found in transportation are projected to expand

Of the 20 largest occupations within transportation, the 12 occupations that are projected to gain employment are customer service representatives (+5,700), truck drivers, heavy & tractor-trailer (+2,050), office clerks, general (+1,900), taxi drivers & chauffeurs (+1,200), bus drivers, school (+750), cargo & freight agents (+550), sales representatives, services, all other (+500), flight attendants (+500), airline pilots, copilots & flight engineers (+350), cargo & freight agents (+50), and transportation attendants, except flight attendants & baggage porters (+0 or +0.2%).

Job gains are likely for occupations related to air transportation because business at the Newark Liberty International Airport and other airports in the state is expected to increase. Other occupations will benefit from growth of the population, greater use of technology and the expansion of businesses involved in support activities for transportation.

One occupation that is expected to grow as a result of the expansion of Internet-based commerce is customer service representative. As more business is done online rather than face-to-face, more customer service representatives will be needed to resolve problems and answer questions.

Workers in many occupations including customer service representatives, are expected to be hired to handle work generated by the expanding air-transportation industry. Aside from the more obvious airline pilots and flight attendants, other occupations likely to expand due to more air travel include taxi drivers, reservation & ticket agents and cargo & freight agents.

Later in the current decade, the children of the baby boom echo generation will be entering school in increasing numbers. With more school-aged children comes an increased need for school bus drivers and school bus aides. Also, as the general population increases, there will be a greater need for heavy truck & tractor drivers to move the goods the additional population will require.

Distributors and manufacturers are relying more on transportation service companies to schedule shipments, package products and arrange for the storage of goods. It is more efficient for certain businesses to contract out the shipping and warehousing functions to other businesses rather than handle them in-houses. These "logistics" companies are classified in the support activities for transportation industry group.

### 2008 estimated employment & 2018 projected employment for the 20 distribution occupations with the largest employment in 2009

	2008 Estimated	2018 Projected	Change 2008-2018		Annual Average Job Openings		
Occupation Title	Employment	Employment	Number	Percent	Total	Growth	Replacements
Laborers & freight, stock & material movers, hand	79,650	73,500	-6,150	-7.7%	2,560	0	2,560
Customer service representatives	59,400	65,100	5,700	9.6%	2,440	570	1,870
Stock clerks & order fillers	69,700	70,650	950	1.4%	1,700	100	1,610
Office clerks, general	74,650	76,550	1,900	2.5%	1,210	190	1,020
First-line supervisors/managers of office &	•	,	•		ŕ		·
andministrative support workers	47,650	49,000	1,350	2.9%	1,210	140	1,080
General & operations managers	41,700	38,600	-3,100	-7.4%	1,210	0	1,210
Sales representatives, wholesale & manufacturing,							
except technical & scientific products	48,200	47,500	-700	-1.4%	1,120	0	1,120
Secretaries, except legal, medical & executive	81,100	77,450	-3,650	-4.5%	1,090	0	1,090
Truck drivers, heavy & tractor trailer	47,000	49,050	2,050	4.3%	1,050	200	840
Bookkeeping, accounting & auditing clerks	60,500	61,900	1,400	2.3%	870	140	730
Shipping, receiving & traffic clerks	23,700	20,700	-3,000	-12.7%	590	0	590
Packers & packagers, hand	31,350	28,300	-3,000	-9.6%	520	0	520
Truck drivers, light or delivery service	27,950	27,800	-150	-0.5%	500	0	500
Industrial truck & tractor operators	15,950	15,650	-350	-2.1%	480	0	480
First-line supervisors/managers of non-retail sales							
workers	21,650	21,500	-200	-0.8%	450	0	450
Sales managers	14,600	15,750	1,150	8.0%	430	120	310
Sales representatives, wholesale & manufacturing,							
technical & scientific products	14,150	14,100	-50	-0.5%	330	0	330
Order clerks	8,750	6,000	-2,750	-31.6%	250	0	250
Driver/sales workers	10,550	10,600	50	0.6%	200	10	190
First-line supervisors/managers of helpers, laborers							
and material movers	8,800	8,550	-300	-3.2%	150	0	150
Source: New Jersey Department of Labor & Wo	orkforce Develop	ment, Occupatio	nal Employment	Projections 2008	-2018.		

Of the 20 occupations employing the most workers at distribution companies in 2009, 12 are projected to loose employment between 2008 and 2018 and 8 are projected to grow.

## Many of the same trends which are affecting transportation are also affecting workers in distribution occupations

Of the 20 largest occupations within transportation, the 12 occupations that are projected to loose employment are laborers, & freight, stock and material movers, hand (-6,150), secretaries, except legal, medical & executive (-3,650), general & operations managers (-3,100), shipping, receiving & traffic clerks (-3,000), packers & packagers, hand (-300), order clerks (-2,750), sales representatives, wholesale & manufacturing, except technical & scientific products (-700), industrial truck & tractor operators (-350), first-line supervisors/managers of helpers, laborers & material movers (-300), first-line supervisors/managers of non-retail sales workers (-200), truck drivers, light or delivery service (-150), sales representatives, wholesale & manufacturing, technical & scientific products (-50). The number of warehouse worker and secretarial positions is expected to diminish as distribution centers and offices become more automated. Also, as more commerce is carried on through the Internet, there will be less need for sales representatives and first-line supervisors of non-retail sales workers. Also, as businesses merge and increase in size, there will likely be fewer general managers since there will be fewer establishments as smaller businesses close.

The 8 distribution occupations which are expected to expand from 2008 to 2018 are customer service representatives (+5,700), truck drivers, heavy & tractor trailer (2,050), office clerks, general (+1,900), bookkeeping, accounting & auditing clerks (+1,400), first-line supervisors of office & administrative support workers (+1,350), sales managers (+1,150), stock clerks & order fillers (+950), and driver/sales workers (+50). The number of customer service representatives is expected to grow as more selling moves to the Internet. Rather than dealing in person with sales people, Internet customers contact businesses by phone or computer and questions are answered by the customer service representatives. Because the population is growing, more truck drivers will be needed to transport goods needed by the additional people. As businesses continue to get larger, the number of office support staff is expected to increase.

#### These 20 occupations are projected to loose the most jobs between 2008 & 2018

			<u>.</u>				
			Change 2008-2018		Annual Average Job Openings		penings
Occupation Title		•	Number	Parcent	Total	Growth	Replacements
•	• •	• •					
	,	•			•		
	·	•			•	_	
. •	·	•	·				
	·	•			•		
•	20,700	20,700	0,000	12.1 /0	000	,	, 550
	17 850	14 900	-2 950	-16.5%	240	(	240
•	·	•					
	•	•					
	0,700	0,000	2,700	01.070	200	,	200
	79 950	73 400	-6 550	-3 3%	1 440	(	1,440
	·	•	·		•		
. •	•		•				
•	·	•	·				
	•	·	·				
	•	•	·				
**	,	·	·				
•	•	•	·				
	·	·	·				
• • • • • • • • • • • • • • • • • • • •	•		•				
	Occupation Title s & freight, stock & material movers, hand ries, except legal, medical & executive er programmers & operations managers s & packagers, hand g, receiving & traffic clerks e supervisors/managers of production and g workers ks lerks and cleaners, except maids & housekeeping s housekeeping cleaners ors, testers, sorters, samplers & weighers ervice mail carriers ng & filling machine operators & tenders rocessors & typists try keyers ssemblers rketers administrative support workers, all other tion & record clerks, all others	s & freight, stock & material movers, hand ries, except legal, medical & executive er programmers 41,700 & operations managers 41,700 s & packagers, hand g, receiving & traffic clerks es supervisors/managers of production and g workers ks 9,400 lerks and cleaners, except maids & housekeeping s housekeeping cleaners rest, testers, sorters, samplers & weighers ervice mail carriers ng & filling machine operators & tenders rocessors & typists try keyers s semblers rketers administrative support workers, all other 79,650 81,100 81,100 81,70	Occupation Title         Estimated Employment         Projected Employment           s & freight, stock & material movers, hand ries, except legal, medical & executive         81,100         77,450           er programmers         19,000         15,750           & operations managers         41,700         38,600           & packagers, hand g, receiving & traffic clerks         23,700         20,700           e supervisors/managers of production and g workers         17,850         14,900           ks         9,400         6,650           lerks         8,750         6,000           and cleaners, except maids & housekeeping         79,950         73,400           housekeeping cleaners         24,750         23,000           ors,testers, sorters, samplers & weighers         11,500         9,850           ervice mail carriers         11,850         10,300           ng & filling machine operators & tenders         15,050         13,500           occessors & typists         11,750         10,300           try keyers         9,150         7,650           ssemblers         12,250         10,800           cketers         8,400         7,000           cadministrative support workers, all other         7,800         6,400	Occupation Title         Estimated Employment         Projected Employment         Number           s & freight, stock & material movers, hand ries, except legal, medical & executive         79,650         73,500         -6,150           ries, except legal, medical & executive         81,100         77,450         -3,650           er programmers         19,000         15,750         -3,250           & operations managers         41,700         38,600         -3,100           s & packagers, hand         31,350         28,300         -3,050           g, receiving & traffic clerks         23,700         20,700         -3,000           e supervisors/managers of production and g workers         17,850         14,900         -2,950           ks         9,400         6,650         -2,750           lerks         8,750         6,000         -2,750           and cleaners, except maids & housekeeping         79,950         73,400         -6,550           housekeeping cleaners         24,750         23,000         -1,750           ors,testers, sorters, samplers & weighers         11,500         9,850         -1,700           ervice mail carriers         11,850         10,300         -1,550           ocessors & typists         11,750         10,300	Occupation Title         Estimated Employment         Projected Employment         Number         Percent           s & freight, stock & material movers, hand ries, except legal, medical & executive         81,100         77,450         -3,650         -4.5%           er programmers         19,000         15,750         -3,250         -17.0%           & operations managers         41,700         38,600         -3,100         -7.4%           s & packagers, hand         31,350         28,300         -3,050         -9.6%           g, receiving & traffic clerks         23,700         20,700         -3,000         -12.7%           e supervisors/managers of production and g workers         17,850         14,900         -2,950         -16.5%           ks         9,400         6,650         -2,750         -29.2%           terks         8,750         6,000         -2,750         -31.6%           and cleaners, except maids & housekeeping         79,950         73,400         -6,550         -3.3%           housekeeping cleaners         24,750         23,000         -1,750         -7.1%           ors, testers, sorters, samplers & weighers         11,500         9,850         -1,700         -14.6%           ervice mail carriers         11,850         10,3	Occupation Title         Estimated Employment         Projected Employment         Number         Percent         Total           is & freight, stock & material movers, hand ries, except legal, medical & executive         81,100         77,450         -6,150         -7.7%         2,560           er programmers         19,000         15,750         -3,650         -4.5%         1,090           & operations managers         41,700         38,600         -3,100         -7.4%         1,210           & operations managers, hand         31,350         28,300         -3,050         -9.6%         520           operations full fill fill fill fill fill fill fill	Occupation Title         Estimated Employment         Projected Employment         Number         Percent         Total         Growth           s & freight, stock & material movers, hand         79,650         73,500         -6,150         -7.7%         2,560         0           rise, except legal, medical & executive         81,100         77,450         -3,650         -4.5%         1,090         0           er programmers         19,000         15,750         -3,250         -17.0%         360         0           & operations managers         41,700         38,600         -3,100         -7.4%         1,210         0           & packagers, hand         31,350         28,300         -3,050         -9.6%         520         0           g, receiving & traffic clerks         23,700         20,700         -3,000         -12.7%         590         0           e supervisors/managers of production and g workers         17,850         14,900         -2,950         -16.5%         240         0           ks         9,400         6,650         -2,750         -29.2%         230         0           elerks         3,750         73,400         -6,550         -33,3%         1,440         0           housekeeping cleaner

Source: New Jersey Department of Labor & Workforce Development, Occupational Employment Projections 2008-2018

Seven of the 20 occupations projected to loose the most jobs from 2008 to 2018 were also among the occupations with the largest employment in either transportation or distribution in 2009. Fewer workers are expected to be needed in low-level warehouse positions and certain clerical jobs as work in these areas becomes more automated,.

### Here are a few developments likely to affect TLD employment in the future

In January 2011, the Regional Plan Association announced the results of a study which indicate that by 2030, the number of passenger trips through Newark Liberty International Airport is expected to increase by 33 percent over 2010 levels. In 2010, there were 33.1 million trips at the airport. By 2020, the number is expected to rise to 37.1 million increase to 48 million by 2030. The New York Port Authority initiated its own study shorty thereafter on how to accommodate the projected increase in business. The present capacity of the Newark airport is 36.4 million trips per year. The Port Authority wants to move quickly to expand capacity at Newark Liberty as well as its other airports, LaGuardia and John F Kennedy international airports. The port authority is looking into adding a new jet runway at Newark at a cost of \$5 billion and remodeling Terminals A, B and C.

Three developments together are expected to result in a substantial increase in shipping volumes at the Port of Newark over the next 20 years. In July 2011, the Port Newark Container Terminal signed a 20-year lease extension for its facilities with the New York Port Authority. The company's inbound container volume Port Newark grew from 210,507 containers in 2009 to 261,433 in 2010 while outbound container volume increased from 219,582 in 2009 to 265,273 in 2010. Future volume at the port is expected to increase as a result of an agreement between Port Newark Container Terminal and the Mediterranean Shipping Company to increase cargo volume at the port to 1.1 million containers by 2030. The Mediterranean Shipping Company is the world's second-largest shipping company. The deal will also result in additional business for New Jersey trucking companies and warehouses which help store and transport freight moving through the port. In order to handle the extra cargo, the terminal expects to spend \$500 million to upgrade its facilities at the port over the next 20 years. A third development is a project to raise the height of the Bayonne Bridge to accommodate the larger ships that are expected after the Panama Canal is reconfigured to accept them. Work on the bridge won't be completed until at least 2016.

According to a study by market research firm Collier's International, Southern New Jersey's warehouses are facing stiff competition from newer facilities in Pennsylvania's Lehigh Valley, which is also part of the Philadelphia regional warehouse space market. Over the last decade there has been a movement toward taller warehouses. Many of the warehouse buildings in southern New Jersey date from the 1990s and before and do not have sufficient ceiling height to operate as efficiently as modern facilities. Despite lower average rents in southern New Jersey, the southern New Jersey market had a higher vacancy rate during the second quarter of 2011 (10.9%) than the Lehigh Valley (10.0%) The report indicates that the construction of new facilities is necessary if Southern New Jersey is to become more competitive with the Lehigh's I-78 corridor in the Class A warehouse space market.

FOR MORE INFORMATION ON NEW JERSEY'S TRANSPORTATION, LOGISTICS AND DISTRIBUTION INDUSTRY CLUSTER, CONTACT:

**JOANNE CARAMELO** 

EMAIL: JOANNE.CARAMELO@DOL.STATE.NJ.US

PHONE: (609)292-2582

Transportation, Logistics, Distribution Industry Cluster